CONFIDENTIAL

DISPATCH

CLASSIFICATION: ~~SECRET~~

DISPATCH SYMBOL AND NO.

25X1

TO

INFO ATT:

HEADQUARTERS FILE NO.

REF:

25X1
25X1

FROM

DATE

SUBJECT: Chief, /Operational Air-Fed Incinerator

RE: "43-3" — (CHECK "X" ONE)

	MARKED FOR INDEXING
X	NO INDEXING REQUIRED
	INDEXING CAN BE LIMITED BY QUALIFIED HQ. DESIGNATOR

25X1
25X1

ACTION REQUIRED

REFERENCE(S): ~~Paragraph 3~~

dated 17 June 1959

25X1

1. The first prototype of the new air-fed incinerator is undergoing a thorough testing. As stated in your dispatch, problems still do remain. However, at this point we are optimistic and should eventually come up with a unit which will be suitable for field use. Attached is a list of answers to the questions in the reference dispatch.

2. During visit to Headquarters he mentioned a method under development of destroying papers in a safe drawer using sodium chlorate and short fibered asbestos. If this development has progressed, we would like to have a more detailed description of this system so we can possibly employ it in some of our situations.

25X1

3. A copy of the pamphlet entitled "Destruction of Classified Paper Materials by the Sodium Nitrate Method" is also attached. This copy was requested by during the conference held at Headquarters.

25X1

25X1

Attachment:
One Envelope

8 July 1959

Distribution:
3 - COS, /attachment
1 - RI wo/attach
1 - Phys. Sec. Div. wo/attach
1 - TSS/SRB wo/attach
1 - WE wo/attach
1 - ED Br File wo/attach
1 - ED Proj File w/attach

DD/P/TSS/ED/AIA:mc

25X1

25X1

FORM 10-57 53 (40) USE PREVIOUS EDITION. REPLACES FORMS 51-28, 51-28A AND 51-29 WHICH ARE OBSOLETE.

CLASSIFICATION: ~~SECRET~~ CONFIDENTIAL

CONTINUED

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8 July 1959

DATA ON THE NEW AIR-FED INCINERATOR

1. Listed below are answers to some of your questions on the new Air-Fed Incinerator:

(a) The inner liner of the incinerator is fabricated from 16 gauge Type 304 stainless steel. The outer container is fabricated from an 11 gauge low carbon steel (boiler plate). A radiation shield of 24 gauge stainless steel is incorporated between the inner and outer liners. The screen or grid at the top is made of Nichrome 5 Mesh with a solid circular plate bottom to direct the gas flow around and out along the side of the grid screening.

(b) The proposed life span of the incinerator is a rather difficult question to answer. There is a possibility the grid may wear out; however, this can be replaced with a minimum of effort in about 15 minutes using a speed wrench, hammer, and a pair of needle nose pliers. Other break downs may occur such as erosion wear on the stack, but these difficulties can not be foreseen at this time.

(c) The design of the incinerator allows for the use of a gasoline generator as a power source for operation. It is necessary to have 220 Volt, 60 Cycle, 3 Phase current to operate the motor blower. The present incinerator employs "Buffalo Industrial Exhauster" Size 25, Type "M".

(d) The temperatures recorded on the outside container ranged around 200°F maximum. During routine burning of 200 pounds per hour the bare hand can easily be placed against the outside surface. At increased rates of burning the outside surface over the door becomes hot, but the lower portions still remain relatively cool. The thermo-couple shown in the photograph was used during initial testing. It is no longer used and the hole was simply plugged.

(e) Large quantities of soot do not result from burning large quantities of paper. This incinerator has the air nozzles or jets so placed to give an intimate mixture of air with the burning paper which gives a very high degree of burning leaving virtually little smoke or fly ash to come out the stack. It presently appears that the smoke or fly ash would pass any Smoke Restriction Laws in the world except those invoked in Los Angeles. To date most types of papers have been burned in this incinerator with the exception of large quantities of carbon paper and films. However, the tests proposed by our personnel will include these. It has been found that during burning, in order to obtain the optimum results over extended periods of time and loadings, it is best to keep the paper level inside of the incinerator about 1-2 inches below the level of the uppermost jets. This can be done by observing the level during loading, or through the viewing port on the side.

(f) There is no definite date for production of these incinerators. This will be decided as soon as the proper personnel have a chance to express their views. The cost of this device or its component parts will be dependent upon the number to be produced.

(g) We do not feel that sodium nitrate would be a satisfactory aid to burning the last small portion of paper. Coke may be added prior to the loading of the paper as a terminal ignition promoter. Charcoal had been tried but it tends to burn out too rapidly to aid at the end. The best procedure determined to date has been to keep the paper level down below the uppermost row of jets during burning and near the end turn the air off and on several times. The main thing is to gain experience using this device and each time the amount of unburned paper becomes less.

2. The exhaust stack of the present Air-Fed Incinerator is fabricated to simply get the hot gases out of the building and into the atmosphere. The incinerator chimney can be incorporated into a normal boiler chimney; however, the area of the main chimney, to serve both the incinerator and boiler, must then be at least equal to the sum of the areas of the outlets of the two devices.

3. We presently do not have a satisfactory set of engineering drawings or specifications to send you.

(WHEN FILLED IN)

ROUTING AND RECORD SHEET

FROM:

C/TSS/Engineering Division

TO	ROOM NO.	DATE RECEIVED	DATE FORWARDED	OFFICER'S INITIALS
1. AC/TSS/R&D		7/8	7/8	
2. TSS/SPB WE/6	1058 I Bldg.	13July	13July57	PEL
3.				
4. C/TSS/ED 1414				
5.				
6.				
7. RI				
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COMMENTS

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COORDINATING OFFICERS	OFFICE
	WE/6
	13 July 57

AUTHENICATING OFFICER

NAME	TITLE
	C/TSS/ED

25X1

RELEASING OFFICER

NAME	TITLE
	AC/TSS/R&D

25X1

ENCLOSURE	ABSTRACT	FILE NUMBER
	INDEX	

DATE MICROFILMED	DOCUMENT DATE	DOCUMENT NUMBER
		OELW-16584

FORM

DISPATCH

CLASSIFICATION: SECRET

DISPATCH SYMBOL AND NO.: [redacted] 25X1

TO: INFO ATT: [redacted]

HEADQUARTERS FILE NO.: REF: [redacted] 25X1 25X1

FROM: Chief, [redacted]

DATE: [redacted] 25X1

SUBJECT: [redacted]/Operational Air-Fed Incinerator

RE: "43-3" — (CHECK "X" ONE)

	MARKED FOR INDEXING
XX	NO INDEXING REQUIRED
	INDEXING CAN BE JUDGED BY QUALIFIED HQ. DESK ONLY

25X1

ACTION REQUIRED: Paragraph 3

REFERENCE(S): [redacted] dated 17 June 1959 25X1

1. The new air-fed incinerator has just undergone its final check-out and was received in Headquarter's area this week where it is to be used for further testing and demonstration by [redacted] personnel. This testing will begin as soon as possible. 25X1

2. As you stated in your dispatch, problems still do remain. We hope to have most of these problems solved relatively soon so that we may start producing these incinerators for field use. Attached is a list of answers to the questions in the referenced dispatch. You may inform [redacted] that if we may be of any further assistance we would be very happy to cooperate. 25X1

3. During [redacted] visit to Headquarters he mentioned a method under development of destroying papers in a safe drawer using sodium chlorate and short fibered asbestos. If this development has progressed, we would like to have a more detailed description of this system so we can possibly employ it in some of our situations. 25X1

4. A copy of the pamphlet entitled "Destruction of Classified Paper Materials by the Sodium Nitrate Method" is also attached. This copy was requested by [redacted] conferences held at headquarters. 25X1

[redacted] 25X1

LLN

Attachment:
One Envelope

8 July 1959

Distribution:
3 - [redacted] w/attachment 25X1

FORM 10-57 53 (40)	USE PREVIOUS EDITION. REPLACES FORMS 51-28, 51-28A AND 51-29 WHICH ARE OBSOLETE.	CLASSIFICATION: SECRET	☐ CONTINUED	PAGE NO. 1